

Claims

1. A retractable barrier, comprising:
 - a first support member;
 - a take-up member supported by the first support member;
 - a second support member spaced apart from the first support member;
 - a retractable panel that includes a proximal end attached to the take-up member and a distal end that can be releasably coupled to the second support member, wherein the retractable panel can selectively retract onto the take-up member and extend out toward the second support member;
 - a stop member disposed on the retractable panel; and
 - a catch member disposed on the first support member and being associated with the stop member such that the catch member impedes the movement of the stop member to limit an extent to which the retractable panel can extend out from the first support member.
2. The retractable barrier of claim 1, wherein the retractable panel is a roll-up panel, and the take-up member is a roller that can be rotated to selectively take up and pay out the roll-up panel.
3. The retractable barrier of claim 2, further comprising a retracting mechanism coupled to the roller for urging the roller to take up the rollup panel.
4. The retractable barrier of claim 3, wherein the retracting mechanism includes a spring.
5. The retractable barrier of claim 1, wherein the stop member is disposed on the retractable panel at an intermediated location between the proximal end and the distal end.

6. The retractable barrier of claim 1, wherein the first support member defines a slot whose surrounding structure is the catch member.

7. The retractable barrier of claim 1, wherein the stop member is vertically elongate.

8. The retractable barrier of claim 1, wherein the retractable panel defines a plurality of sleeves in which the stop member can be selectively inserted to adjust the extent to which the retractable panel can extend from the first support member.

9. The retractable barrier of claim 1, wherein the retractable panel includes an upper strap and a lower strap with a web extending therebetween, wherein the upper strap and the lower strap have a greater ultimate tensile strength than the web..

10. The retractable barrier of claim 9, wherein the retractable panel includes an intermediate strap interposed between the upper strap and the lower strap, wherein the intermediate strap has a greater ultimate tensile strength than the web.

11. The retractable barrier of claim 1, wherein the retractable panel is selectively movable to a stored position, a blocking position, and an impacted position, wherein the distal end is separated from the second support member when the retractable panel is in the stored position, the distal end is coupled to the second support member when the retractable panel is in the blocking position, and the distal end is coupled to the second support member when the retractable panel is in the impacted position; however, in the blocking position more of the retractable panel is taken up by the take-up member than when the retractable panel is in the impacted position, whereby the retractable panel incrementally extends from the first support member as the retractable panel moves from the blocking position to the impacted position.

12. The retractable barrier of claim 1, further comprising a pliable strap handle attached to the distal end of the retractable panel.

13. The retractable barrier of claim 1, wherein the retractable panel is of contrasting colors to provide a warning.

14. The retractable barrier of claim 1, further comprising a warning label displayed on the retractable panel, wherein the warning label suggests that a safety hazard may exist.

15. A retractable barrier, comprising:

- a first support member;
- a roller supported by the first support member;
- a second support member spaced apart from the first support member;
- a rollup panel that includes a proximal end attached to the roller and a distal end that can be releasably coupled to the second support member, wherein the roller can be rotated to selectively take up and pay out the rollup panel;
- a retracting mechanism coupled to the roller for urging the roller to take up the rollup panel;
- a stop member carried by the rollup panel such that the stop member is disposed at an intermediate position between the proximal end and the distal end; and
- a catch member disposed on the first support member and being associated with the stop member such that the catch member impedes the movement of the stop member to limit an extent to which the roller can pay out the rollup panel.

16. The retractable barrier of claim 15, wherein the stop member is disposed at an intermediate position between the proximal end and the distal end.

17. The retractable barrier of claim 15, wherein the first support member defines a slot whose surrounding structure is the catch member.

18. The retractable barrier of claim 15, wherein the stop member is vertically elongate.

19. The retractable barrier of claim 15, wherein the rollup panel defines a plurality of sleeves in which the stop member can be selectively inserted to adjust the extent to which the roller can pay out the rollup panel.

20. The retractable barrier of claim 15, wherein the rollup panel includes an upper strap and a lower strap with a web extending therebetween, wherein the upper strap and the lower strap have a greater ultimate tensile strength than the web.

21. The retractable barrier of claim 20, wherein the rollup panel includes an intermediate strap interposed between the upper strap and the lower strap, wherein the intermediate strap has a greater ultimate tensile strength than the web.

22. The retractable barrier of claim 15, wherein the rollup panel is selectively movable to a stored position, a blocking position, and an impacted position, wherein the distal end is separated from the second support member when the rollup panel is in the stored position, the distal end engages the second support member when the rollup panel is in the blocking position, and the distal end engages the second support member when the rollup panel is in the impacted position; however, in the blocking position more of the rollup panel is wrapped around the roller than when the rollup panel is in the impacted position, whereby the rollup panel partially unwraps from the roller as the rollup panel moves from the blocking position to the impacted position.

23. A retractable barrier, comprising:

a first support member that includes a structure defining a slot;

a roller supported by the first support member;
a second support member that is spaced apart from the first support member;

a rollup panel that includes an upper strap, a lower strap, a web interposed therebetween, a proximal end attached to the roller, and a distal end that can be releasably coupled to the second support member, wherein the roller can be rotated to selectively take up and pay out the rollup panel, and the upper strap and the lower strap have a greater ultimate tensile strength than the web.

a retracting mechanism coupled to the roller for urging the roller to take up the rollup panel;

a stop member that is vertically elongate and carried by the rollup panel at an intermediated location between the proximal end and the distal end; and

a catch member provided by the structure that defines the slot in the first support member, wherein the catch member is associated with the stop member such that the catch member impedes the movement of the stop member to limit an extent to which the roller can pay out the rollup panel, wherein the rollup panel is selectively movable to a stored position, a blocking position, and an impacted position, wherein the distal end is separated from the second support member when the rollup panel is in the stored position, the distal end is coupled to the second support member when the rollup panel is in the blocking position, and the distal end is coupled to the second support member when the rollup panel is in the impacted position; however, in the blocking position more of the rollup panel is wrapped around the roller than when the rollup panel is in the impacted position, whereby the rollup panel incrementally unwraps from the roller as the rollup panel moves from the blocking position to the impacted position.

24. A method of transferring a first reactive force responsive to an impact force exerted against a rollup panel of a retractable barrier, the method comprising:

anchoring a first support member at a first location;
anchoring a second support member at a second location that is spaced apart from the first location;

supporting a roller by the first support member, wherein a portion of the rollup panel is wrapped about the roller;

extending the rollup panel between the roller and the second support member; and

transmitting the first reactive force through the rollup panel and through the first support member, such that most of the first reactive force bypasses the roller.

25. The method of claim 24, further comprising transmitting through the second support member a second reactive force that is responsive to the impact force.

26. A method of transferring a first reactive force responsive to an impact force of a material handling vehicle striking a rollup panel, wherein the rollup panel is part of a retractable barrier that is installed at a loading dock that includes a dock leveler, the method comprising:

anchoring a first support member and a second support member to the loading dock such that the dock leveler is interposed between the first support member and the second support member;

supporting a roller by the first support member, wherein a portion of the rollup panel is wrapped about the roller;

extending the rollup panel between the roller and the second support member; and

transmitting the first reactive force through the rollup panel and through the first support member such that most of the reactive force bypasses the roller.

27. The method of claim 26, further comprising transmitting through the second support member a second reactive force that is responsive to the impact force.